

## **DEPARTMENT OF TRANSPORTATION**

### **Federal Aviation Administration**

#### **14 CFR Part 39**

**[Docket No. 2003-NM-218-AD; Amendment 39-13602; AD 2004-09-13]**

**RIN 2120-AA64**

### **Airworthiness Directives; Empresa Brasileira de Aeronautica S.A. (EMBRAER) Model EMB-135BJ and EMB-145XR Series Airplanes**

**AGENCY:** Federal Aviation Administration, DOT.

**ACTION:** Final rule.

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**SUMMARY:** This amendment adopts a new airworthiness directive (AD), applicable to certain EMBRAER Model EMB-135BJ and EMB-145XR series airplanes, that requires repetitive inspections for cracking in the firewall of the auxiliary power unit (APU), and repair of the firewall if necessary. This action also provides an optional terminating action for the repetitive inspections. This action is necessary to detect and correct cracking in the APU firewall, which could result in reduced structural integrity of the firewall, and a consequent uncontained APU fire that could spread to the airplane structure. This action is intended to address the identified unsafe condition.

**DATES:** Effective June 9, 2004.

The incorporation by reference of certain publications listed in the regulations is approved by the Director of the Federal Register as of June 9, 2004.

**ADDRESSES:** The service information referenced in this AD may be obtained from Empresa Brasileira de Aeronautica S.A. (EMBRAER), P.O. Box 343–CEP 12.225, Sao Jose dos Campos–SP, Brazil. This information may be examined at the Federal Aviation Administration (FAA), Transport Airplane Directorate, Rules Docket, 1601 Lind Avenue, SW., Renton, Washington; or at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call 202-741-6030 or go to [http://www.archives.gov/federal\\_register/code\\_of\\_federal\\_regulations/ibr\\_locations.html](http://www.archives.gov/federal_register/code_of_federal_regulations/ibr_locations.html).

**FOR FURTHER INFORMATION CONTACT:** Todd Thompson, Aerospace Engineer, International Branch, ANM-116, FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington 98055-4056; telephone (425) 227-1175; fax (425) 227-1149.

**SUPPLEMENTARY INFORMATION:** A proposal to amend part 39 of the Federal Aviation Regulations (14 CFR part 39) to include an airworthiness directive (AD) that is applicable to certain EMBRAER Model EMB-135BJ and EMB-145XR series airplanes was published in the Federal Register on March 5, 2004 (69 FR 10362). That action proposed to require repetitive inspections for cracking in the firewall of the auxiliary power unit, and repair of the firewall if necessary. That action also provided an optional terminating action for the repetitive inspections.

## **Comments**

Interested persons have been afforded an opportunity to participate in the making of this amendment. No comments were submitted in response to the proposal or the FAA's determination of the cost to the public.

## **Conclusion**

The FAA has determined that air safety and the public interest require the adoption of the rule as proposed.

## **Cost Impact**

We estimate that 40 airplanes of U.S. registry will be affected by this proposed AD.

It will take approximately 1 work hour per airplane to accomplish the repetitive inspections, at an average labor rate of \$65 per work hour. Based on these figures, the cost impact of the repetitive inspections on U.S. operators is estimated to be \$2,600, or \$65 per airplane, per inspection cycle.

The cost impact figure discussed above is based on assumptions that no operator has yet accomplished any of the requirements of this AD action, and that no operator would accomplish those actions in the future if this AD were not adopted. The cost impact figures discussed in AD rulemaking actions represent only the time necessary to perform the specific actions actually required by the AD. These figures typically do not include incidental costs, such as the time required to gain access and close up, planning time, or time necessitated by other administrative actions.

## **Regulatory Impact**

The regulations adopted herein will not have a substantial direct effect on the States, on the relationship between the national Government and the States, or on the distribution of power and responsibilities among the various levels of government. Therefore, it is determined that this final rule does not have federalism implications under Executive Order 13132.

For the reasons discussed above, I certify that this action (1) is not a "significant regulatory action" under Executive Order 12866; (2) is not a "significant rule" under DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979); and (3) will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act. A final evaluation has been prepared for this action and it is contained in the Rules Docket. A copy of it may be obtained from the Rules Docket at the location provided under the caption ADDRESSES.

## **List of Subjects in 14 CFR Part 39**

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

## **Adoption of the Amendment**

Accordingly, pursuant to the authority delegated to me by the Administrator, the Federal Aviation Administration amends part 39 of the Federal Aviation Regulations (14 CFR part 39) as follows:

### **PART 39—AIRWORTHINESS DIRECTIVES**

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

#### **§ 39.13 [Amended]**

2. Section 39.13 is amended by adding the following new airworthiness directive:

# AIRWORTHINESS DIRECTIVE



Aircraft Certification Service  
Washington, DC

U.S. Department  
of Transportation  
**Federal Aviation  
Administration**

*We post ADs on the internet at "www.faa.gov"*

The following Airworthiness Directive issued by the Federal Aviation Administration in accordance with the provisions of Title 14 of the Code of Federal Regulations (14 CFR) part 39, applies to an aircraft model of which our records indicate you may be the registered owner. Airworthiness Directives affect aviation safety and are regulations which require immediate attention. You are cautioned that no person may operate an aircraft to which an Airworthiness Directive applies, except in accordance with the requirements of the Airworthiness Directive (reference 14 CFR part 39, subpart 39.3).

**2004-09-13 Empresa Brasileira de Aeronautica S.A. (EMBRAER):** Amendment 39-13602.  
Docket 2003-NM-218-AD.

**Applicability:** Model EMB-135BJ series airplanes as listed in EMBRAER Service Bulletin 145LEG-53-0010, dated June 5, 2003; and Model EMB-145XR series airplanes as listed in EMBRAER Service Bulletin 145-53-0037, dated April 30, 2003; certificated in any category.

**Compliance:** Required as indicated, unless accomplished previously.

To detect and correct cracking in the firewall of the auxiliary power unit (APU), which could result in reduced structural integrity of the firewall, and a consequent uncontained APU fire that could spread to the airplane structure, accomplish the following:

## **Initial Inspection**

(a) Within 200 flight hours or 90 days after the effective date of this AD, whichever is first: Do a detailed inspection of the APU firewall for cracking, per Part I of the Accomplishment Instructions of EMBRAER Service Bulletin 145-53-0037 (for Model EMB-145XR series airplanes), dated April 30, 2003; or Service Bulletin 145LEG-53-0010 (for Model EMB-135BJ series airplanes), dated June 5, 2003; as applicable.

**Note 1:** For the purposes of this AD, a detailed inspection is defined as: "An intensive visual examination of a specific structural area, system, installation, or assembly to detect damage, failure, or irregularity. Available lighting is normally supplemented with a direct source of good lighting at intensity deemed appropriate by the inspector. Inspection aids such as mirror, magnifying lenses, etc., may be used. Surface cleaning and elaborate access procedures may be required."

## **Repetitive Inspections/Repair**

(b) If no cracking is found during any inspection required by paragraph (a) of this AD: Repeat the inspection required by paragraph (a) of this AD thereafter at intervals not to exceed 200 flight hours or 90 days, whichever is first. Accomplishment of the replacement specified in paragraph (d) of this AD terminates the repetitive inspections required by this paragraph.

(c) If any cracking is found during any inspection required by paragraph (a) of this AD: Before further flight, determine if the cracking can be repaired per Part I of the Accomplishment Instructions of EMBRAER Service Bulletin 145-53-0037, dated April 30, 2003; or Service Bulletin 145LEG-53-0010, dated June 5, 2003; as applicable.

(1) If the cracking can be repaired: Before further flight, repair the cracking per Part I of the Accomplishment Instructions of the applicable service bulletin. Repeat the inspection required by paragraph (a) of this AD thereafter at intervals not to exceed 200 flight hours or 90 days, whichever is first.

(2) If the cracking cannot be repaired: Before further flight, replace the APU firewall with a new firewall by accomplishing all of the actions per Part II of the Accomplishment Instructions of the applicable service bulletin. Accomplishment of the replacement terminates the repetitive inspections required by paragraphs (b) and (c)(1) of this AD.

### **Optional Terminating Action**

(d) Replacement of the APU firewall with a new firewall by accomplishing all of the actions per Part II of the Accomplishment Instructions of EMBRAER Service Bulletin 145-53-0037, dated April 30, 2003; or 145LEG-53-0010, dated June 5, 2003; as applicable; constitutes terminating action for the repetitive inspections required by paragraphs (b) and (c)(1) of this AD.

### **Alternative Methods of Compliance**

(e) In accordance with 14 CFR 39.19, the Manager, International Branch, ANM-116, Transport Airplane Directorate, FAA, is authorized to approve alternative methods of compliance for this AD.

### **Incorporation by Reference**

(f) The actions shall be done in accordance with of EMBRAER Service Bulletin 145-53-0037, dated April 30, 2003; or EMBRAER Service Bulletin 145LEG-53-0010, dated June 5, 2003; as applicable. This incorporation by reference was approved by the Director of the Federal Register in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. Copies may be obtained from Empresa Brasileira de Aeronautica S.A. (EMBRAER), P.O. Box 343–CEP 12.225, Sao Jose dos Campos–SP, Brazil. Copies may be inspected at the FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington; or at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call 202-741-6030 or go to [http://www.nara.gov/federal\\_register/code\\_of\\_federal\\_regulations/ibr\\_locations.html](http://www.nara.gov/federal_register/code_of_federal_regulations/ibr_locations.html).

**Note 2:** The subject of this AD is addressed in Brazilian airworthiness directive 2003-07-02, dated August 18, 2003.

### **Effective Date**

(g) This amendment becomes effective on June 9, 2004.

Issued in Renton, Washington, on April 21, 2004.

Kalene C. Yanamura,

Acting Manager, Transport Airplane Directorate, Aircraft Certification Service.

[FR Doc. 04-9762 Filed 5-4-04; 8:45 am]

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